

# Archie GoH Landfill Fire Fresno, California



# Archie GoH Debris Fire Site Location Fresno, California





# Situation

## Construction & Demolition Debris Recycling Facility

- fire on main pile
- 4.9 acres of material
- 10 to 40 feet in height
- ~ 160,000 cubic yards
- industrial / low income residential community
- worst air quality in nation





# Regulatory Authorities

- **Federal**
  - EPA
- **State (California)**
  - Department of Forestry & Fire Protection (CDF)
  - Integrated Waste Management Board (IWMB)
  - Office of Emergency Services (OES)
  - Air Resources Board (ARB)
- **Local**
  - City of Fresno Fire Department
  - Air Pollution Control District
  - Fresno County Environmental Health





# Cooperating Agencies

Fresno City Fire

Fresno Police Department

US Environmental Protection Agency

California Integrated Waste Management Board

Fresno County Environmental Health

California Office of Emergency Services

California Department of Forestry & Fire Protection

San Joaquin Valley Air Pollution Control District

US Coast Guard

Regional Water Quality Control Board

National Weather Service

California Department of Health

California Office of Environmental Health Hazard Assessment

California Air Resources Board

Fresno County Sheriff

California Occupational Safety and Health Administration

City of Fresno Mayor's Office

City of Fresno City Council

Fresno County Health Office

City of Fresno Department of Public Works

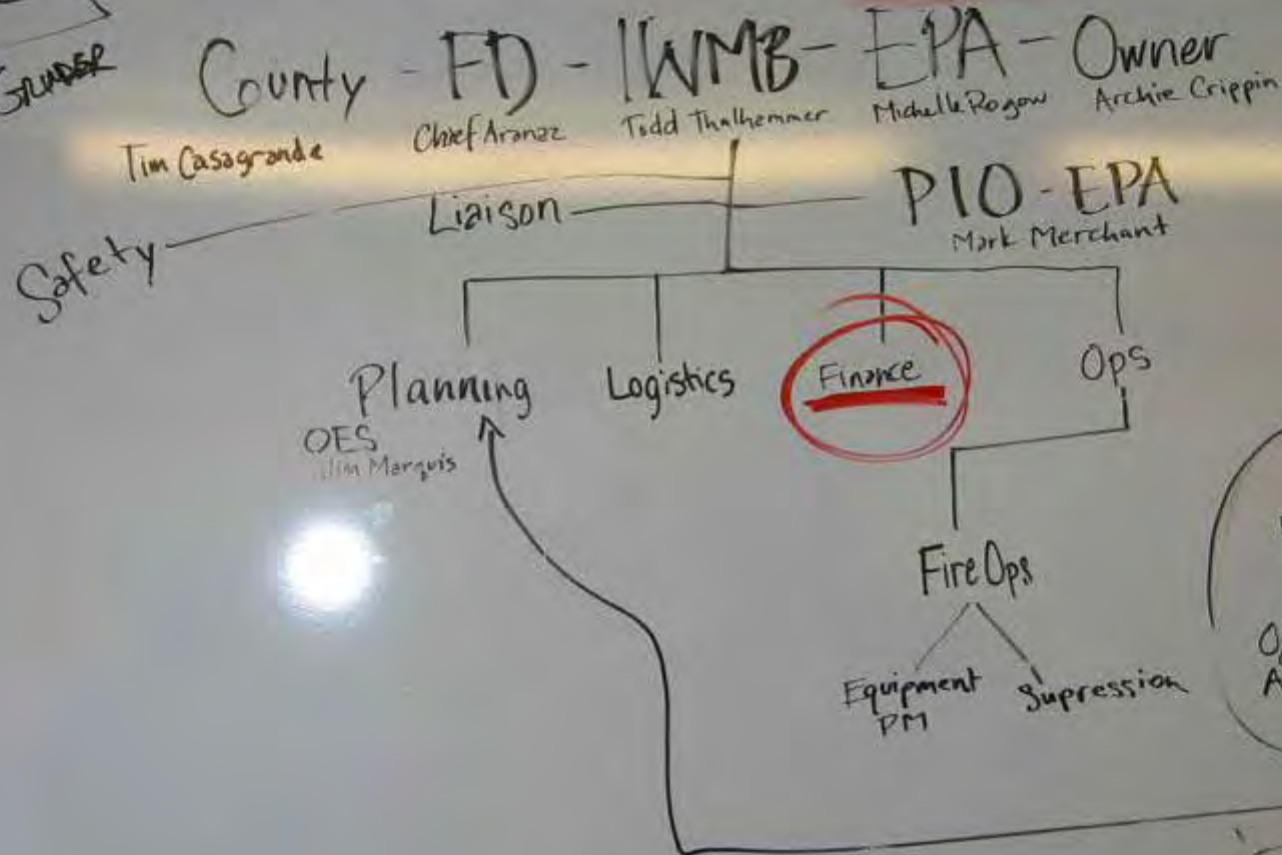
Fresno County Department of Public Works



# January 15, 2003 Unified Command

Move EQ  
SOIL  
TUB GRINDER

1-15-03



AIR DISTRICT



# Initial Strategy

## Control emissions and put the fire out !

- CIWMB to fund heavy equipment operations
- City of Fresno to supply fire fighters
- USEPA to provide air monitoring, health and safety support



# Incident Command

Effective 1-17-03

## UNIFIED COMMAND

JOEL ARANAZ, FRESNO FD, FRN  
TIM CASAGRANDE, FRESNO COUNTY  
MICHELLE ROGOW, US EPA

## SAFETY

RAY BROWN, USCG

## LIAISON

CLINT NICHOLS, FRN

## INFORMATION

JIC  
Federal, State, Local

## State on Scene Coordinator

KURT LATIPOW, OES

## OPERATIONS

DOUG HICKS, CDF

## PLANNING

JIM MARQUIS, OES  
Deputy  
BILL BONDSHU, OES

## LOGISTICS

GARY KARLE, CDF

## FINANCE

WALT CHACON, CDF





# Health & Environmental Assessment/Impacts

- **Conducted Air Sampling**
  - VOCs
  - SVOCs
  - Metals
  - Particulates
- **Air Monitoring**
  - Carbon Monoxide
  - VOCs
- **Weather and Air Quality data**
- **Waste water (Black Water Ops)**
- **Disposition of Wastes**



# Incident Command

Effective 1-18-03

**UNIFIED COMMAND**  
JOEL ARANAZ, FRESNO FD  
TIM CASAGRANDE, FRESNO COUNTY  
MICHELLE ROGOW, US EPA

**SAFETY**  
RAY BROWN

**LIAISON**  
CLINT NICHOLS

**INFORMATION**  
JIC

**OPERATIONS**  
DOUG HICKS

**PLANNING**  
JIM MARQUIS  
Deputy  
Bill Bondshu

**LOGISTICS**  
GARY KARLE

**FINANCE**  
WALT CHACON  
MIKE GREEN

**ASST. SAFETY  
SITE**  
DUNCAN McANDREWS

**OFF-SITE AIR  
MONITORING COORD.**  
TREVOR ANDERSON

**COMM UNIT  
LEADER**  
CDF TBD

**ENVIRONMENTAL  
GROUP**  
MARTY SMITH

**FIRE CONTROL  
GROUP**  
FRN DIVS TBD

**SITUATION UNIT LEADER**  
CDF TBD

**SUPPLY UNIT LEADER**  
CDF TBD

**ON-SITE AIR  
MONITORING**  
CINDY McLEOD

**HEAVY  
EQUIPMENT**

**MED UNIT LEADER**  
FRESNO EMS TBD

**DECON**  
EPA TBD

**FIRE  
SUPPRESSION**

**FACILITIES**  
CDF TBD

**WATER CONTROL  
TECH. SPECIALIST**  
DALE ESSARY



# Public Health Group

- **Formed by UC**
- **Consisted of**
  - EPA Toxicologist
  - State Toxicologist
  - State Health Specialist
  - State Health Response Coordinator
  - County Health Officer
  - EPA Community Involvement Coordinator
  - Air Pollution Control Officer
- **Assess data and disseminate to public**



# Incident Command

EFFECTIVE JANUARY 21, 2003

UNIFIED COMMAND  
JOEL ARANAZ, FRESNO FD  
TIM CASAGRANDE, FRESNO COUNTY  
BRAD SHIPLEY, US EPA

SAFETY OFFICER  
RAY BROWN, USCG

LIAISON OFFICER  
CLINT NICHOLS, FRN

AGENCY REPRESENTATIVES:  
CA OES  
KURT LATIP OVW  
CDF  
LARRY GERMAN  
CA INTEG. WASTE MGMT  
TODD THALMER  
FRESNO PD  
GREG GARNER  
SAN JOAQUIN VALLEY APCD  
JOSE A. MARTINEZ

INFORMATION OFFICER  
JOINT INFORMATION CENTER (JIC)  
LOCAL, STATE, FEDERAL

PUBLIC HEALTH GROUP  
TECHNICAL SPECIALIST  
ADVISORS TO JIC

OPERATIONS SECTION CHIEF  
DOUG HICKS, CDF  
DEPUTY: FRN TBD

PLANNING SECTION CHIEF  
JIM SMITH, CDF  
DEPUTY: JIM MARDUIS, OES

LOGISTICS SECTION CHIEF  
GARY KARLE, CDF  
DEPUTY: CIRILO MEDINA, FRN

FINANCE SECTION CHIEF  
WALT CHACON, CDF  
DEPUTY: MIKE GREEN, CDF

ASST. SAFETY OFFICER-SITE  
DUNCAN McANDREWS, USCG

SITUATION UNIT LEADER  
JOSH CHRISMAN, CDF

COMM UNIT LEADER  
JEFFREY PEMBERTON, CDF

SUPPLY UNIT LEADER  
DANIELLE RUBIDA, CDF

FACILITIES UNIT LEADER  
TOM HARRIS, CDF

ENVIRONMENTAL GROUP  
MARTY SMITH, USCG

FIRE CONTROL GROUP  
DNVS, FRN

WATER SUPPLY GROUP  
DNVS, FRN

ON-SITE AIR  
MONITORING  
ERIC NELSON, RAD

OFF-SITE AIR  
MONITORING  
MIKE WARREN, OES

WATER CONTROL  
TECH. SPECIALIST  
DALE ESSARY, RWD

DECON MODULE  
FRN

HEAVY  
EQUIPMENT

FIRE  
SUPPRESSION





# Suppression Techniques and Tactics





# Heavy Equipment Operations





# Williams arrives



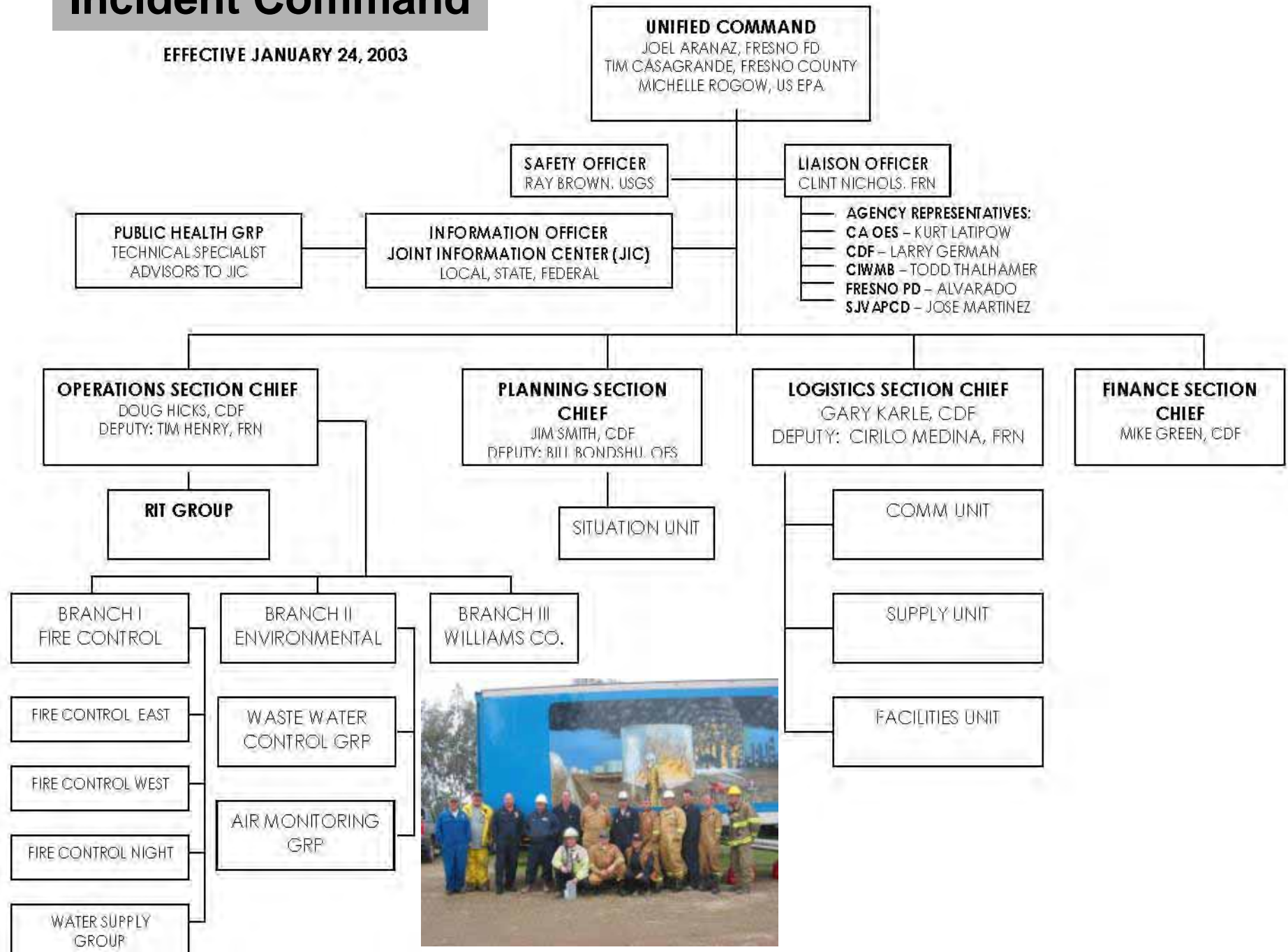
# Set up and transition





# Incident Command

EFFECTIVE JANUARY 24, 2003







# Integration of Municipal and Private Firefighters



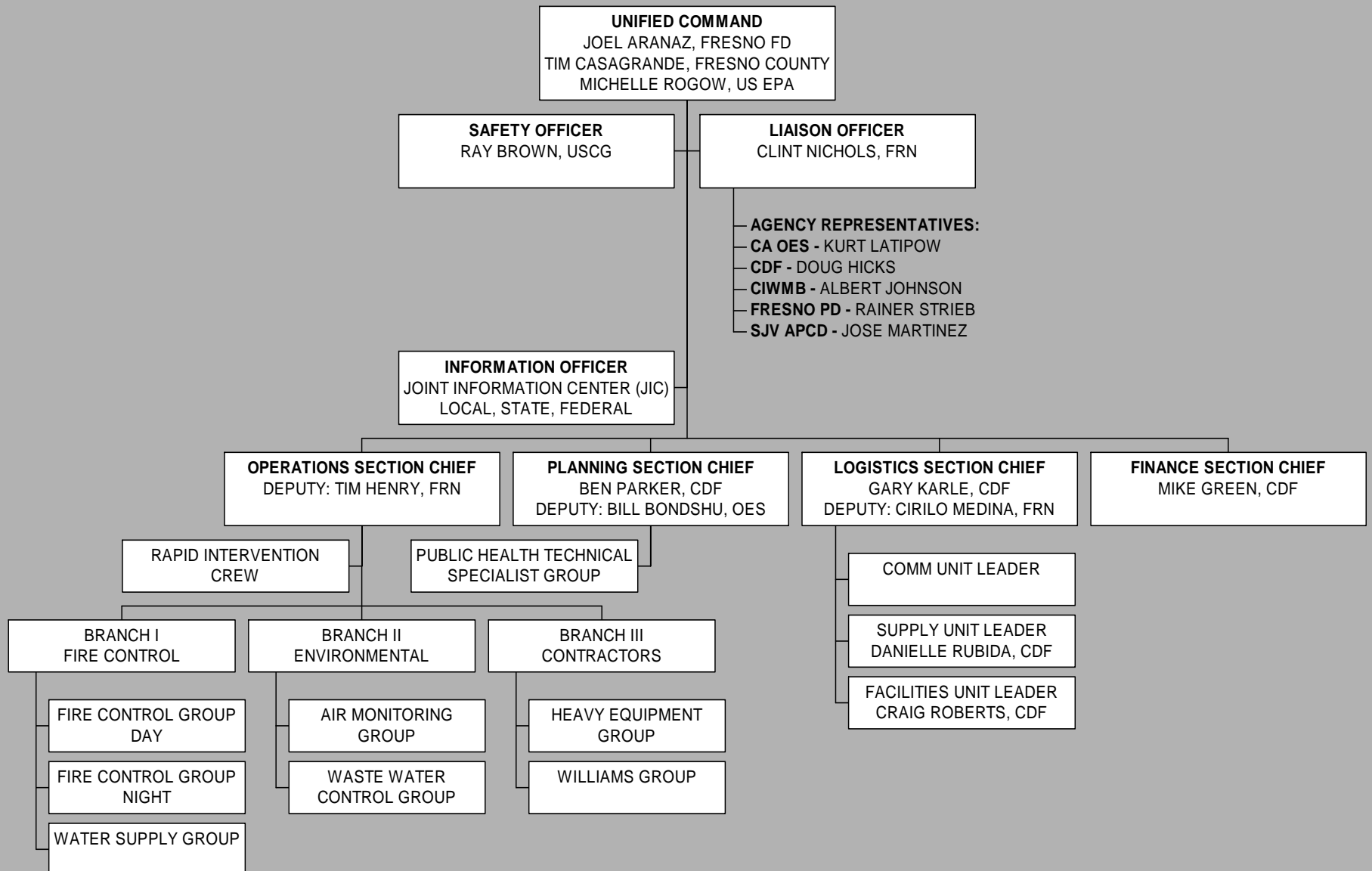


# Working together



# Incident Command

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FEB 7 2003



**February 10, 2003**  
**Fire extinguished**





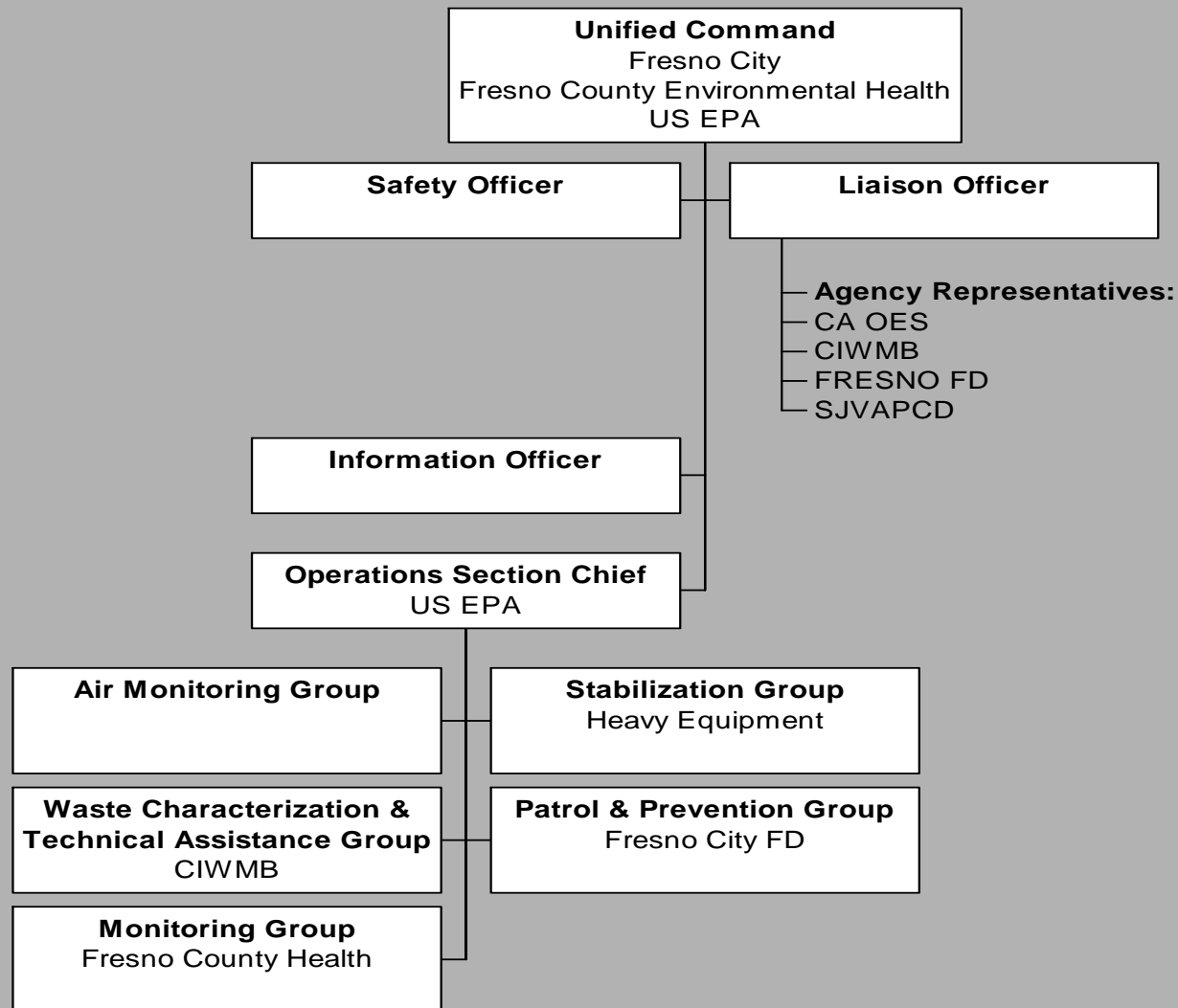
# Phase I - Initial Response

- Fire discovered 1/11/03, burned from 1/11/03 - 2/10/03
- 26 days of fire fighting
- Equipment (up to):
  - 3- 345 excavators
  - 1 - 365 excavator
  - 2 - D-9 dozers
  - 1 - D-8 dozer
  - 2- rock trucks
  - 2 - vacuum trucks
  - 1 - front end loader
- Personnel (up to):
  - 20 Equipment operators/labor
  - 13 Williams Fire
  - 20 Fresno FD
  - 6 safety
  - 3 air sampling/monitoring techs
  - one hell of a JIC!
- Costs:
  - USEPA - \$1.27 million
  - CIWMB - \$680,000
  - City of Fresno - \$600,000

FEB 9 2003



# Phase II –Stabilization







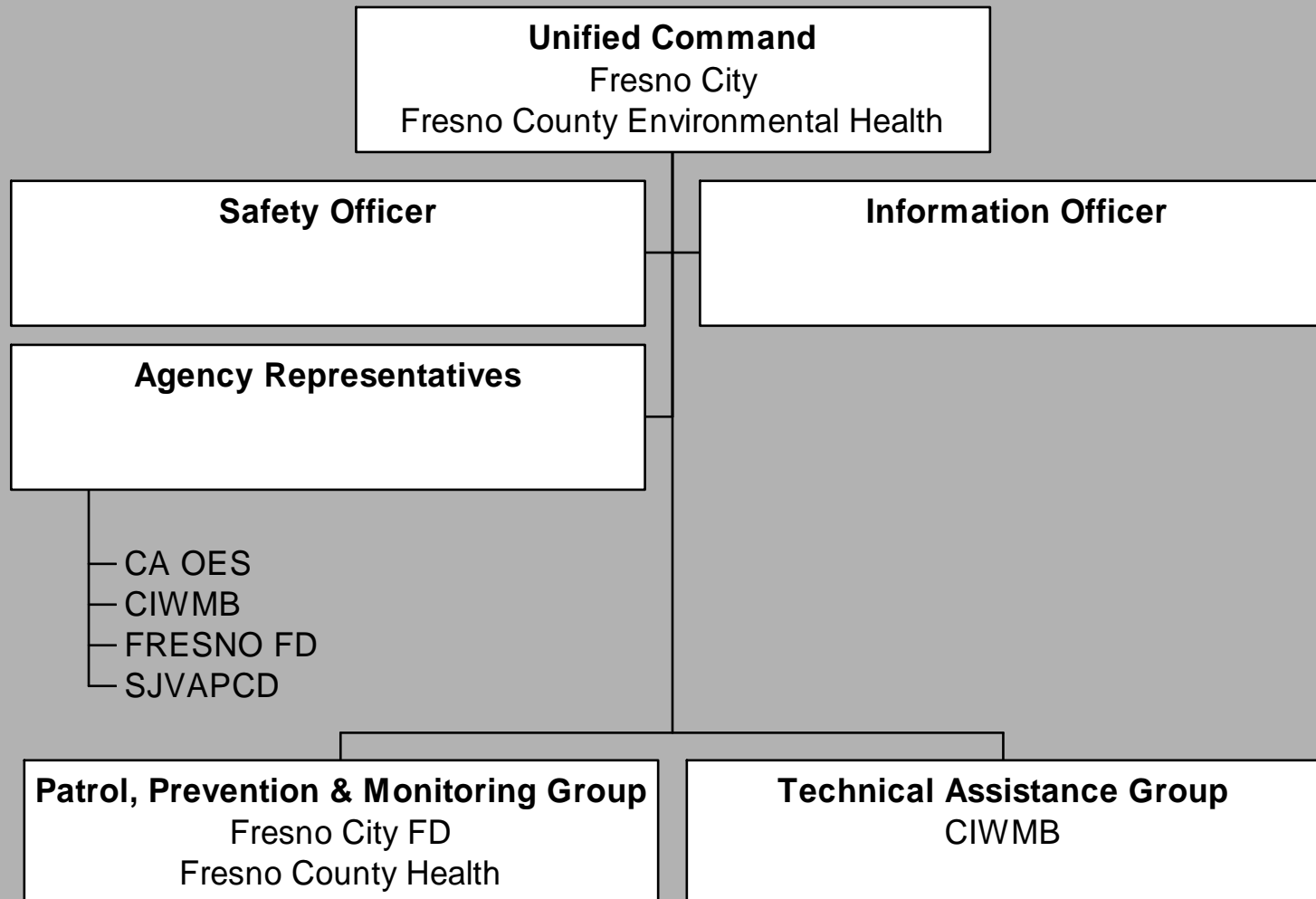


# **Phase II – Segregate, Stabilize, Survey and Sample**

- **2/14/03 - 2/24/03**
  - **3 piles from one, drained all standing water**
  - **Demobe: 2/25/03 - 2/26/03**
- |   |   |
|---|---|
| <ul style="list-style-type: none"><li>• <b>Equipment (up to):</b></li><li>• <b>2 - 345 excavators</b></li><li>• <b>1 - D-9 dozer</b></li><li>• <b>1 - D-6 dozer</b></li><li>• <b>1 - front end loader</b></li><li>• <b>1 – vacuum truck</b></li></ul> | <ul style="list-style-type: none"><li>• <b>Personnel (up to):</b></li><li>• <b>6 Equipment operators/labor</b></li><li>• <b>1 safety</b></li><li>• <b>1 air sampling/monitoring techs</b></li></ul> |
|---|---|
- **Costs:**
  - **USEPA - \$240,000**

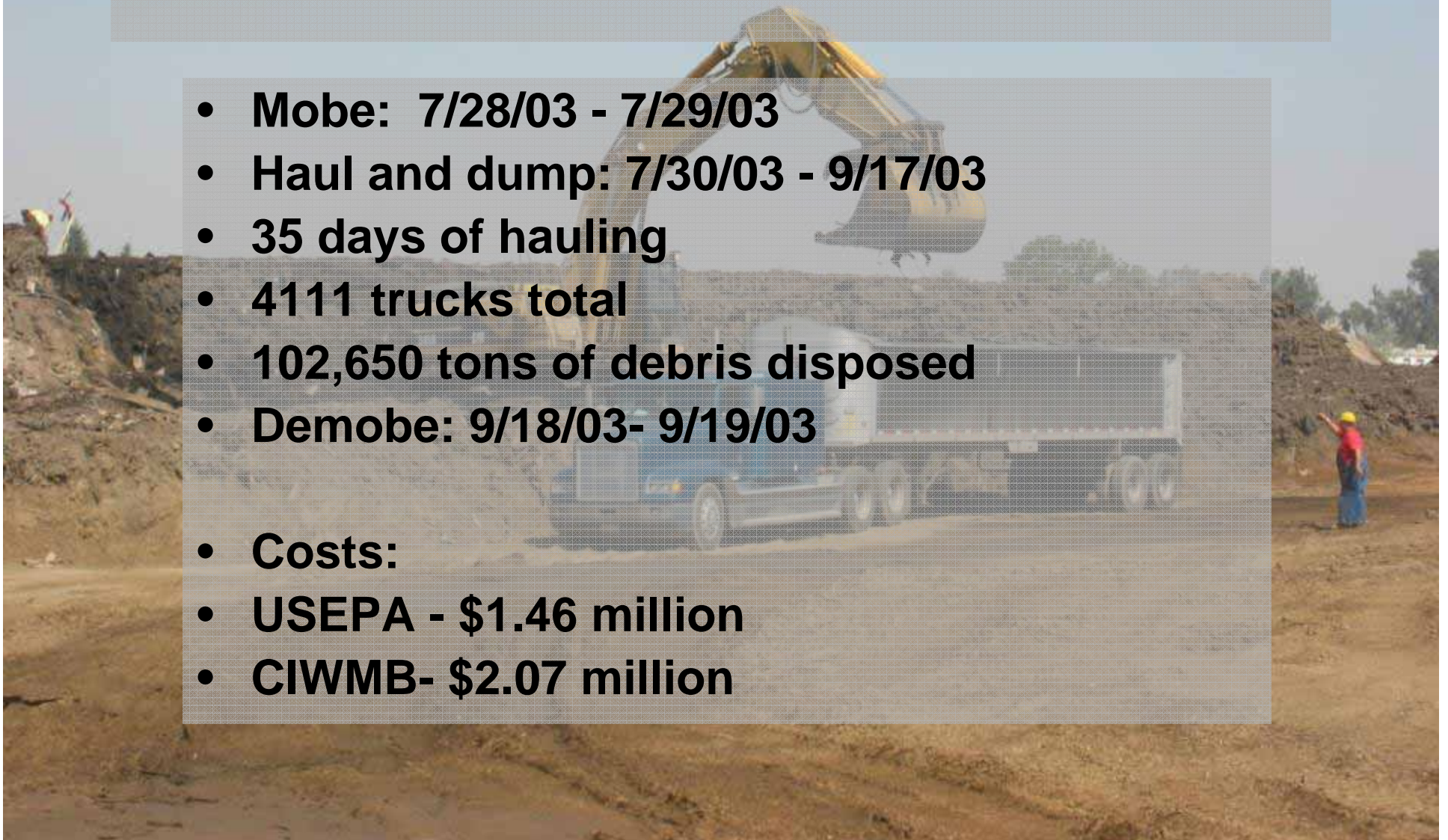


## Phase III- Post Stabilization & Final Disposition



# Phase III - Load, Haul and Dispose

- Mobe: 7/28/03 - 7/29/03
  - Haul and dump: 7/30/03 - 9/17/03
  - 35 days of hauling
  - 4111 trucks total
  - 102,650 tons of debris disposed
  - Demobe: 9/18/03- 9/19/03
- 
- Costs:
  - USEPA - \$1.46 million
  - CIWMB- \$2.07 million





# Safety and Communications



## SITE SAFETY PLAN

Incident: CA 1719 M310-4  
Name: Marks-Nelson Incident

# Safety

- Site safety plan developed by USCG
- Audited by California OSHA
- Reviewed and signed off by all personnel
- Amended as needed with daily briefings
- Personal monitoring on workers







## Joint Information Center (JIC)



## Command Post





## Politicians and Media





# Samples discover hazards at fire

But the 18 chemicals are not at strong enough levels to harm the health of Fresnoans.

By MARK GROSS  
THE FRESNO BEE

Authorities on Monday released a list of 18 potentially hazardous chemicals detected in air samples more than a week ago at the southwest Fresno junk fire.

But they repeated an announcement they made last week that the chemicals were not detected at levels high enough to trigger human health problems.

Only two chemicals—benzene and chloromethane—were mentioned in the Bee's

**ON THE WEB**  
Visit [www.valleyairquality.com](http://www.valleyairquality.com) to read The Bee's special report.

# Blaze not a danger, EPA says

Chemicals in Fresno woodpile smoke not at harmful levels.

By JES  
FUTZKE  
THE BEE

Chemical Air pollution waiting for its spotlight in the public eye.

Air samples at Archie Cr near Marks in contain hazardous chemicals but not enough.

"The issue is whether it's a Risper, as the U.S. Environmental Agency,"

City officials the news. "There is no, the City Manager I don't believe it's going to get be Sunday mail of the issue. 100,000 cubic

concrete, mattresses, wood, metal, plastic and auto parts. Firefighters are working day and night to put out the fire, which they hope is extinguish by 5 p.m. Friday.

# Fire: Chemical levels ruled not harmful

Continued from Page A1  
of Fresno. Vital Center for Economic Development, distributed the data in hopes of easing public awareness of fire-related health issues.

About 2,000 firms posted in English and Spanish were passed out. Another 500 in German were distributed.

At Trinity Church of God in Christ, Kirby handed a stack of fliers in hand out to church members. "We want to make sure people know about it to the community," Kirby said. Williams, "I've got some neighbors who."

Williams, who has grandchildren with severe autism, nodded with understanding. "Thank you for this information. We need it," Trinity Church is about a mile from the fire.

Pastor Daniel Lopez smiled when Williams gave him a stack of fliers.



An excavator pulls wreckage out from the junk pile Tuesday. Fire is still burning inside a 10-ft-tall mound of debris on a small, burning section of the site. Firefighters are working to put out the fire, which they hope is extinguish by 5 p.m. Friday.

Crignen would later receive a second round of chemical testing from a public health agency.

# Fire: Hazardous air will hang around

Continued from Page A1

Baseball and truck practice had begun and soccer practice was under way.

"When you can smell or taste the smoke in the air, you know it's bad," Fresno Unified Superintendent Bill MacIntyre said.

The smell of smoke hanging in the air on Tuesday was one of many parts of Fresno people in Fresno.

Light and air moving the smoke around, said Evan Shipp, superintendent, superintendent with the San Joaquin Valley Air Pollution Control District. People might smell it for a while, and then it moves to another part of the city.

"If you smell it, you should be cautious about exercising outside," Shipp said. "Exercise aggravates air effects."

The air district again advised people not to light fires in their fireplaces today. People also were warned that the air could remain unhealthy, even though Fresno's two particulate matter of the air monitors didn't show

levels of a human hair. The department is now, and the district has only two monitoring sites for it this far.

The district's air quality advisory shows a small increase in particles, but they did not show hazardous air. But officials say they have warned people about smoke hazards from fires in the past, even though they have not had previous PM2.5 measurements.

Particulate 2.5 measures smoke and soot, and usually enters the body's defenses and lodge in the lungs. Triggering asthma attacks and heart problems as well as other lung diseases.

Children, the elderly and people with sensitive lungs are the most vulnerable, health officials say. But people with healthy lungs can be affected as well.

Unlike ozone, the summertime pollutant, particles can penetrate into buildings, especially during episodes such as the one in Fresno.

officials said.

At the site of the fire Tuesday, firefighters briefly worked to pull about the 3- to 4-acre pile, which is part of Archie Crignen Excavation, said Nielsen and Marks executives. But crews stopped because they were not reaching the fire in the pile, officials said.

Aracis said California Industrial Waste Management officials may have a better approach today.

The owner of the Crignen site had received two orders of violation from the air district, officials said. A possible fine would range from \$1,000 to \$50,000.

The fire began at 3 a.m. Saturday by spontaneous combustion. The decomposing wood, moisture and oxygen combined in just the right way to spark the fire.

The flames Tuesday were more visible than on Monday, Aracis said. He said the pile could be burning paint, metal and tires, which make a fire "dirty" with contaminants.



Fire is still burning inside a 10-ft-tall mound of debris on a small, burning section of the site. Firefighters are working to put out the fire, which they hope is extinguish by 5 p.m. Friday.

# Fire: Smoke remains a health concern

Continued from Page A1  
fire and the incident they need. That's what is going on here. We're looking for the fire to be out by 5 p.m. today. We're looking for the fire to be out by 5 p.m. today. We're looking for the fire to be out by 5 p.m. today.

## IF YOU GO

A person looking to clean up the site should be in the area by 5 p.m. today. We're looking for the fire to be out by 5 p.m. today. We're looking for the fire to be out by 5 p.m. today.



The fire site.

Aracis said the fire site is located in the area of the fire. We're looking for the fire to be out by 5 p.m. today. We're looking for the fire to be out by 5 p.m. today.

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# Burning pile contaminated

Two nearby residents have made numerous complaints to the city.

By MARK GROSS  
AND PAUL LAMORE  
THE BEE

After a burning, two large piles of wood, metal, plastic, auto parts and other materials were left in the area.

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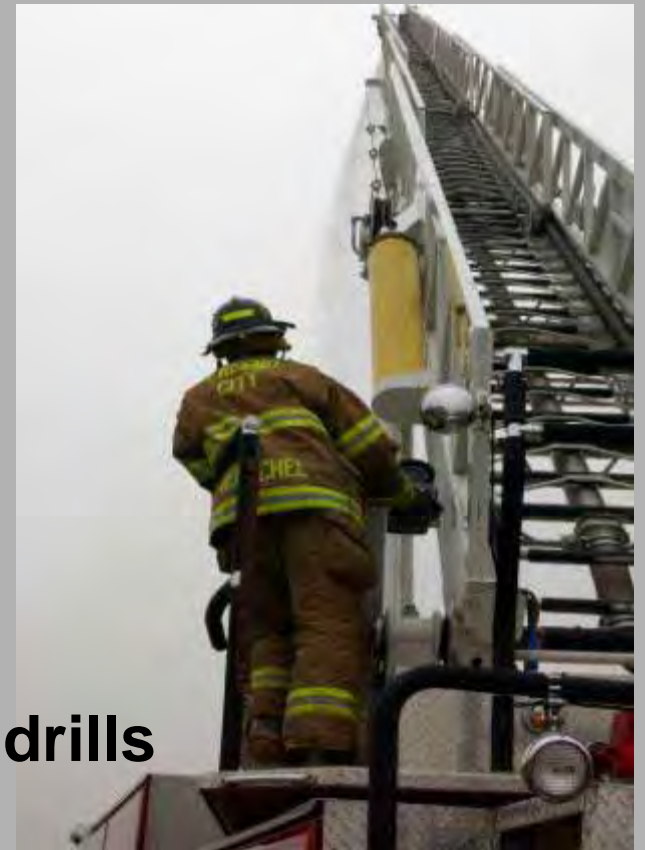
Fresno Fire Department Capt. Ben Bergeron watches Friday as a large fire grows inside the Archie Crignen Excavation site in Fresno. The fire is about to spread to nearby homes in the area. U.S. Environmental Protection Agency spokesman: Mark MacIntyre says.





# Lessons Learned

- **Notifications**
  - Local
  - State
  - Federal
- **Unified Command**
  - Training
  - Qualifications
  - Communication
- **Planning / exercise / workshops / drills**



# Communication and Coordination!





